

CLAIMS

1-24. Cancelled

1 25. (New) A method comprising
2 reserving, for a particular call, packet network resources of a first packet
3 network according to its own reservation policy; and
4 reserving, for the call, packet network resources of a second packet network
5 according to its own reservation policy,
6 the second packet network being coupled to the first packet network and the
7 reservation policy for the first packet network differing from the reservation policy for
8 the second packet network.

1 26. (New) The method of claim 25 wherein
2 the first packet network is a first access packet network associated with a calling
3 party and connected to a backbone packet network,
4 the second packet network is a second access packet network associated with a
5 called party and connected to the backbone packet network, and
6 the reservation policies for the first packet network and the second packet
7 network relate to the reservation of packet network resources for the call.

1 27. (New) The method of claim 25 wherein said first and second access
2 packet networks are television coaxial cable networks and wherein said backbone
3 packet network is a packet telephony service provider's network.

1 28. (New) The method of claim 25 wherein
2 the reserving packet network resources of the first packet network is based on an
3 indication from a calling party; and

4 the reserving packet network resources of the second packet network is based on
5 an indication from a called party.

1 29. (New) The method of claim 28 wherein
2 the first packet network and the second packet network are coupled to each other
3 through a third packet network,
4 the indication from the calling party is a message indicating a limit for packet
5 network resources of the first packet network to be reserved and for packet network
6 resources of the third packet network to be reserved, and
7 the indication from the calling party is a message indicating a limit for packet
8 network resources of the second packet network to be reserved and for packet network
9 resources of the third packet network to be reserved.

1 30. (New) The method of claim 28, wherein
2 the indication from the calling party is a message sent to an originating gate
3 controller; and
4 the indication from the called party is a message sent to a terminating gate
5 controller.

1 31. (New) The method of claim 30 wherein
2 the message sent to the originating gate controller indicates a limit for packet
3 network resources of the first packet network to be reserved; and
4 the message sent to the terminating gate controller indicates a limit for packet
5 network resources of the second packet network to be reserved.

1 32. (New) A method comprising
2 reserving, for a call, packet network resources of an access packet network
3 according to its own reservation policy; and
4 reserving, for the call, packet network resources of a backbone packet network
5 according to its own reservation policy,

6 the backbone packet network being coupled to the access packet network and
7 the reservation policy for the backbone packet network differing from the reservation
8 policy for the access packet network.

1 33. (New) The method of claim 32 wherein said access packet network is a
2 television coaxial cable network and wherein said backbone packet network is a packet
3 telephony service provider's network.

1 34. (New) The method of claim 32 wherein
2 the reservation policy for the access packet network relates to the reservation of
3 packet network resources on a per-call basis, and
4 the reservation policy for the backbone packet network relates to the reservation
5 of packet network resources on a multiple-call basis.

1 35. (New) The method of claim 32 wherein
2 the reservation policy for the access packet network relates to the reservation of
3 packet network resources on a per-call basis, and
4 the reservation policy for the backbone packet network relates to the reservation
5 of packet network resources on a per-call basis.

1 36. (New) The method of claim 32 wherein
2 the reservation policy for the access packet network relates to reserving bi-
3 directional capacity in the access packet network, and
4 the reservation policy for the backbone packet network relates to reserving uni-
5 directional capacity in the backbone packet network.

1 37. (New) The method of claim 32 wherein
2 the reservation policy for the access packet network relates to reserving bi-
3 directional capacity in the access packet network, and
4 the reservation policy for the backbone packet network relates to reserving bi-
5 directional capacity in the backbone packet network.

1 38. (New) A method comprising
2 receiving, from a calling party over a first access packet network, a reserve
3 message for a call;
4 reserving, for the call, in response to the reserve message, packet network
5 resources of the first access packet network according to its own reservation policy; and
6 reserving for the call, in response to the reserve message, packet network
7 resources of a backbone packet network according to its own reservation policy,
8 the backbone packet network being coupled to the access packet network, and
9 the reservation policy for the access packet network and for the backbone packet
10 network being different from one another.

1 39. (New) The method of claim 38 wherein said reserving of packet
2 network resources of the backbone packet network includes
3 sending, in response to said received reserve message, a backbone reserve
4 message into said backbone packet network in order to reserve said packet network
5 resources of said backbone packet network.

1 40. (New) The method of claim 39 wherein said access packet network is a
2 television coaxial cable network and wherein said backbone packet network is a packet
3 telephony service provider's network.

1 41. (New) The method of claim 39 wherein the backbone packet network
2 resources that are reserved in response to said backbone reserve message are resources
3 for only a first direction of the call.

1 42. (New) The method of claim 41 further comprising
2 receiving, from a called party over a second access packet network, a second
3 reserve message for the call;

4 reserving, for the call, in response to the second reserve message, packet
5 network resources of the second access packet network according to its own reservation
6 policy; and

7 reserving, in response to the second reserve message, packet network resources
8 of the backbone packet network according to its own reservation policy for a second
9 direction of the call,

10 the backbone packet network being coupled to the second access packet
11 network, and the reservation policy for the second access packet network and the
12 backbone packet network being different from one another.

1 43. (New) The method of claim 42 wherein said first and second access
2 packet networks are television coaxial cable networks and wherein said backbone
3 packet network is a packet telephony service provider's network.

1 44. (New) A method comprising
2 receiving a reserve message requesting the reservation of at least one packet
3 network resource for a particular call;
4 responsive to the reserve message, reserving for the call packet network
5 resources of a first packet network according to its own reservation policy; and
6 responsive to the reserve message, sending a backbone reserve message to the
7 backbone packet network based on a selected one of a plurality of backbone reservation
8 policies of the backbone packet network, so that packet network resources of the
9 backbone packet network are reserved based on the selected reservation policy.

1 45. (New) The method of claim 44 wherein said first packet network is a
2 television coaxial cable network and wherein said backbone packet network is a packet
3 telephony service provider's network.

1 46. (New) The method of claim 44 wherein
2 the reservation policy for the first packet network defines reserving a bi-
3 directional capacity in the first packet network, and

4 the selected reservation policy for the backbone packet network defines
5 reserving uni-directional capacity in the backbone packet network.

1 47. (New) The method of claim 44 wherein
2 the reservation policy for the first packet network defines reserving bi-
3 directional capacity in the first packet network, and
4 the selected reservation policy for the backbone packet network defines
5 reserving bi-directional capacity in the backbone packet network.

1 48. (New) The method of claim 44 wherein
2 the plurality of reservation policies associated with the backbone packet network
3 includes a reservation policy that reserves packet network resources of the backbone
4 packet network on a per-call basis.

1 49. (New) The method of claim 44 wherein
2 the plurality of reservation policies of the backbone packet network includes a
3 reservation policy that reserves packet network resources of the backbone packet
4 network on a multiple-call basis.

1 50. (New) The method of claim 44 wherein
2 the plurality of reservation policies of the backbone packet network includes a
3 reservation policy that, due to assumed bandwidth availability, does not reserve packet
4 network resources of the backbone packet network.

1 51. (New) The method of claim 44 wherein said method is performed by an
2 originating network edge device connected to both the first packet network and the
3 backbone packet network.

1 52. (New) The method of claim 51 wherein the first packet network is an
2 access packet network associated with a calling party.

1 53. (New) The method of claim 44 wherein said method is performed by a
2 terminating network edge device connected to both the first packet network and the
3 backbone packet network.

1 54. (New) The method of claim 53 wherein the first packet network is an
2 access packet network associated with a called party.

1 55. (New) A method performed by a packet network device for reserving
2 packet network resources for a call to be placed over a path that includes at least first
3 and second packet networks that have different packet network resource reservation
4 policies, said packet network device being coupled to both of said first and second
5 networks, the method comprising

6 receiving a resource reservation message over the first network, and
7 responsive to the received message, reserving resources in both of said first and
8 second networks in accordance with their respective resource reservation policies.

1 56. (New) The method of claim 55 wherein said first packet network is a
2 television coaxial cable network and wherein said second packet network is a packet
3 telephony service provider's network.

1 57. (New) The method of claim 55 wherein at least one of said first and
2 second networks has a plurality of resource reservation policies and wherein said
3 reserving includes reserving resources based on a selected one of the plurality of
4 resource reservation policies.

1 58. (New) The method of claim 55 wherein the packet network device is a
2 network edge device, and the first packet network is a first access network that couples
3 subscriber equipment to the network edge device.

1 59. (New) The method of claim 58 wherein the second packet network is a
2 backbone network coupled to a second access network.

1 60. (New) The method of claim 55 wherein the packet network device is
2 one of: a router and a bridge.

1 61. (New) The method of claim 55 wherein said reserving resources in both
2 of said first and second networks reserves for the call a constant-bit-rate channel in the
3 first network and reserves for the call other than a constant-bit-rate channel in the
4 second network.

1 62. (New) The method of claim 61 wherein said first packet network is a
2 television coaxial cable network and wherein said second packet network is a packet
3 telephony service provider's network.

1 63. (New) The method of claim 55 wherein the resource reservation policy
2 for each network defines how resources for that network are reserved.

1 64. (New) The method of claim 63 wherein the resource reservation policy
2 for each network has characteristics that define a type of reservation made for the
3 network resource.

1 65. (New) The method of claim 63 wherein the resource reservation policy
2 for each network has characteristics that define a type of reservation made for the
3 network resource.

1 66. (New) The method of claim 65 wherein said characteristics indicate a
2 uni-directional or a bi-directional reservation capacity.

1 67. (New) The method of claim 55 wherein the resource reservation
2 message is received from subscriber equipment.

1 68. (New) A method performed by a network edge device for reserving
2 packet network resources for a call to be placed over a path that includes an access
3 packet network and a backbone packet network, said access packet network and said
4 backbone packet network having different packet network resource reservation policies,
5 said network edge device coupling said access network to said backbone network, the
6 method comprising

7 receiving a resource reservation message from subscriber equipment over the
8 access network, the resource reservation message specifying an amount of bandwidth
9 desired for the call, and

10 responsive to the received message, reserving resources for the specified amount
11 of bandwidth in both said access network and said backbone network in accordance
12 with those networks' respective resource reservation policies.

1 69. (New) The method of claim 68 wherein said access packet network is a
2 television coaxial cable network and wherein said backbone packet network is a packet
3 telephony service provider's network.

1 70. (New) The method of claim 68 wherein at least one of the access
2 network and the backbone network has a plurality of resource reservation policies and
3 wherein said reserving includes reserving resources for the call based on a selected one
4 of the plurality of resource reservation policies.

1 71. (New) The method of claim 70 wherein the packet network device is
2 one of: a router and a bridge.

1 72. (New) The method of claim 71 wherein said reserving reserves a
2 constant-bit-rate resource in the access network and other than a constant-bit-rate
3 resource in the backbone network.

1 73. (New) The method of claim 72 wherein said access network is a
2 television coaxial cable network and wherein said backbone packet network is a packet
3 telephony service provider's network.

1 74. (New) A packet network device for reserving packet network resources
2 for a call to be placed over a path that includes at least first and second packet networks
3 that have different packet network resource reservation policies, said packet network
4 device being adapted to be coupled to both of said first and second networks, the packet
5 network device being further adapted to
6 receive a resource reservation message over the first network, and
7 responsive to the received message, reserve resources in both of said first and
8 second networks in accordance with their respective resource reservation policies.

1 75. (New) The invention of claim 74 wherein said packet network device is
2 further adapted to select for the call a particular one of a plurality of resource
3 reservation policies of a particular one of said networks and to reserve resources in said
4 particular network based on the selected resource reservation policy.

76. (New) The invention of claim 74 wherein the packet network device is
one of: a router and a bridge.